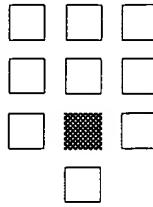


Netergy Media Hub 4



The Netergy[™] Media Hub 4 is a cost-effective device that bridges the gap between conventional telephony equipment such as telephones and fax machines and the new world of Internet protocol (IP) communications over private and public networks. One Netergy Media Hub 4 supports up to four independent calls simultaneously. Multiple Media Hubs can be used in an IP telephone system to provide as many lines as required.

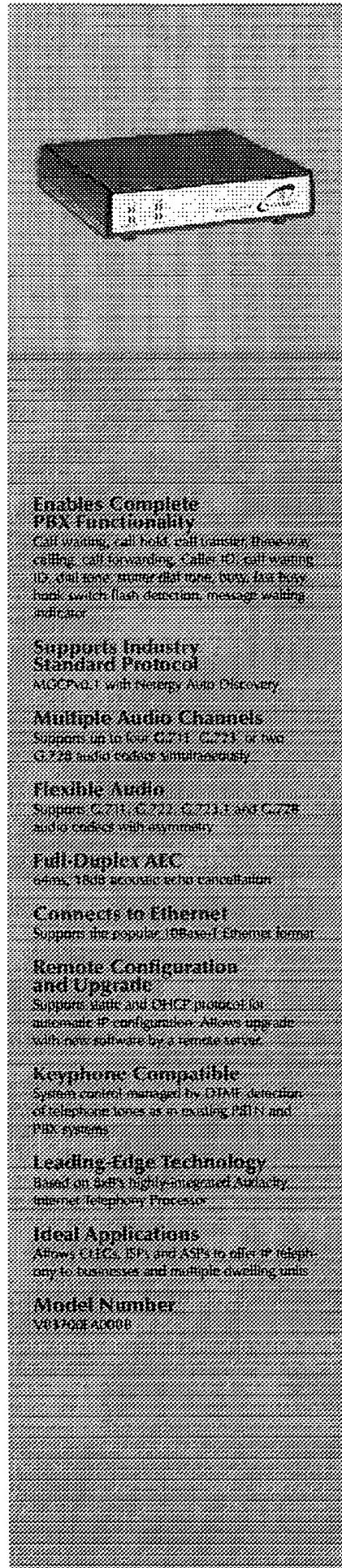
In concert with full-featured iPBXs such as 8x8's Netergy iPBX Server Software, the Netergy Media Hub 4 offers a full range of PBX features, including call waiting, call hold, call transfer, three-way calling, message waiting indicator, and call forwarding. During a phone call, the feature set can be controlled via the touch-tone keypad of a standard telephone. Because it uses standard touch-tone telephones as both its audio and user interface, Netergy-based systems are both reliable and cost-effective, especially when compared to proprietary digital PBX telephones.

While Media Hubs can be placed in a central wiring closet, the unit's small foot-print makes it ideal for "distributed telephony," with Media Hubs located near the telephones that they support. For example, a Netergy Media Hub 4 could be located at the union of four office cubicles, eliminating the need for a separate twisted-pair wiring network for telephones in an office.

The Media Hub 4 supports the MGCP Voice over IP (VoIP) standard with Netergy extensions for auto discovery and configuration. The Netergy Media Hub 4 also incorporates FLASH memory and remote upgrade capability, so that the Netergy iPBX Server Software can upgrade the Media Hubs automatically via the network as required.

To avoid network congestion, the Netergy Media Hub 4 supports several low bit rate audio codecs, including G.723.1 and G.728, in addition to standard rate codecs (G.711 and G.722). The unit is codec agile, allowing the iPBX Server Software to specify different codecs on each line and to switch codecs during a call if network conditions demand that it do so. Full acoustic echo cancellation and comfort noise generation are also supported on each line.

The Media Hub 4 is part of a complete family of Netergy Media Hubs, including the Media Hub 2 and the Media Hub 24. The Media Hub 2 provides two analog telephone lines and is intended to support a two line phone or a phone and a fax machine in a single office. The Media Hub 24 provides 24 lines in a rack mount format and is designed for centralized wiring closet installations.



Enables Complete PBX Functionality

Call waiting, call hold, call transfer, three-way calling, call forwarding, Caller ID, call waiting, line busy, tone detection, line busy, tone switch, flash detection, message waiting indicator.

Supports Industry Standard Protocols

MGCP, I.3, with Netergy Auto Discovery

Multiple Audio Channels

Supports up to four G.711, G.723.1 and G.728 audio codecs simultaneously

Flexible Audio

Supports G.711, G.722, G.723.1 and G.728 audio codecs simultaneously

Full-Duplex AEC

Supports 16dB acoustic echo cancellation

Connects to Ethernet

Supports the popular IEEE 802.3 Ethernet format

Remote Configuration and Upgrade

Supports static and DHCP protocol, automatic IP configuration, allows upgrade with new software by a remote server

Keypad Compatible

System control managed by keypad, telephone, or telephone lines, as in existing PBX and PABX systems

Leading-Edge Technology

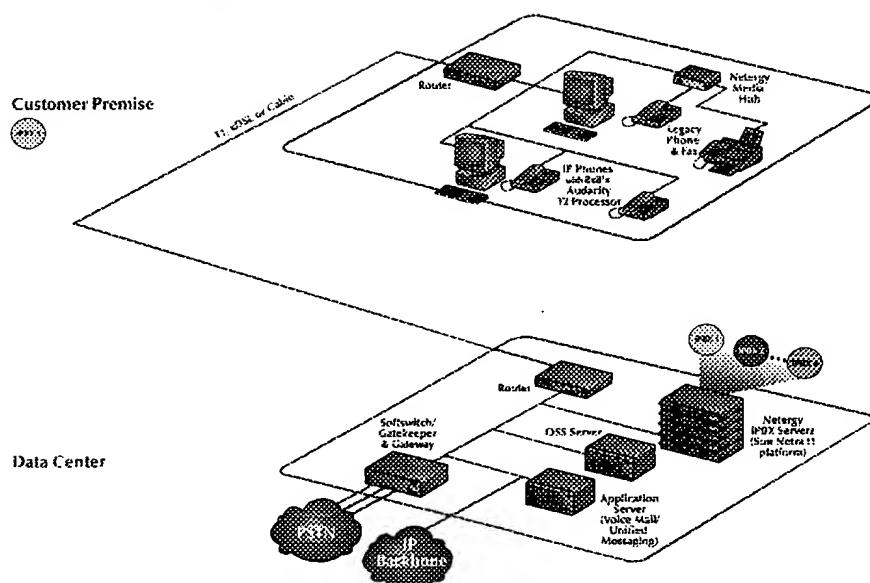
Based on fully integrated Analog-to-Digital Telephone Processor

Ideal Applications

Allows MGCP, SIP and H.323 to offer telephony to businesses and multiple dwelling units

Model Number

MG410000000000000000



Call Control Standards

The Netergy Media Hub 4 supports the following communication standards for IP networks.

- MGCPv0.1 with Netergy Auto Discovery
- DHCP, TCP/IP, UDP, SNMP, RTP, RTCP

Audio Standards and Performance

- G.711, G.722, G.723.1, G.728
- Acoustic echo cancellation (64ms tail, 18dB rejection)
- Voice activity detection
- Comfort noise generation
- DTMF detection
- Call tone generation

Network Interface

- 10Base-T

Audio

Codes

- G.711, G.722, G.723.1, G.728

Frequency Response

- 50Hz - 40KHz

Attenuation

- Acoustic echo cancellation

64ms tail, 18dB rejection

Network Interface

Physical

- 10Base-T

Transports

- TCP/IP

Configuration

- CLI/HTTP

Telephone Interface

Connectors

- RJ11

Cable Length Limitations

- 400' (120m)

Current Rating (maximum)

- 25mA/24VAC

Ring Inductance

- 4.4 mH/24VAC peak current (max optional)

12.5mA/24VAC

AC load impedance

- 1000 Ohms

Electrical

Operating Voltage

- 12VDC

Power Consumption

- 14 watts

Environmental

Temperature

- Operating: 42° to 102° F (0° to 38.9° C)

Storage: -40° to 140° F (-40° to 60° C)

Humidity

- Operating: 10% to 90%

Storage: 10% to 90%

Electromagnetic Compliance

- FCC Part 15, Class B, CE, UL

Dimensions

Height x Width x Depth

- 1.75" x 7.75" x 7.75" (44.45mm x

196.88mm x 196.88mm)

Weight

- 1.41 lbs (0.6 kg)



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